Sampling Utterances and Grammatical Analysis, Revisited (SUGAR)

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SAMPLING PROTOCOL

Collect a 10-minute language sample
When talking with the child:
1. **Start** with the following kinds of questions:
    a. "Have you ever gone to a/the X.
        Yes.
        Tell me all about it.

    b. "Have you ever been to a/the X?
        No,
        I wonder what happens there
2. Match the **length of your child's turn**
    a. If your child only says a few words at a time, don't overwhelm him with a long turn.
3. Match your **child's pace**
    a. Give your child time to think about what to say. Wait (5 elephants), if needed.
    b. If your child is active, you may need to pick up the pace to keep his attention
4. Match your **child's interest**
    a. Pay attention to what the child wants to talk about.
5. **Cue** your child to take a turn
    a. Body language
    b. Make a comment
    c. Ask a question
6. **Avoid**
    a. As many yes/no or product (one-word answer) questions as possible
    b. Questions that test the child's knowledge
    c. Questions that are too hard for the child to answer
    d. Questions that answer themselves
7. **Ask** process questions
    a. How did/do…
    b. What happened
    c. Why did
        i. More than one-word "why" questions
        ii. Not appropriate for children under 4.5 years
8. **Use** "Tell me…" or "I wonder…" statements.
9. **Use Turnabouts**
    a. Comment + cue for child to talk
10. **Use Narrative Elicitations**
    a. Build on what the child says or what you know

b. Begin with…
  i. You mom says you… that sounds like fun. Tell me what happened
  ii. I know that you… Tell me what happened
  iii. Did you ever… Tell me what you did

TRANSCRIPTION

- Transcribe the sample directly onto your computer.
- Only type the child's utterances, NOT yours.
- Do NOT include identifying data.
- Set "Numbering", found on the tool bar in the "Paragraph" section, to ensure that you only type 50 utterances.
  o An utterance is a sentence or less, separated by a pause, drop in voice, inhalation or combination of these. Do not belabor the process of utterance determination.
- Stop when you have 50 utterances.

RULES FOR TRANSCRIBING (Think *speed*!)
- Type in plain English as spoken
- Omit punctuation to save time.
- Do NOT embellish the child's utterance. In other words, don't add morphemes that are missing.
- Type words in full even when pronunciation omits portions as follows:
  o *Talkin'* should be transcribed as "Talking"
  o *Gonna, wanna, gotta, hafta* should be transcribed as "going to, want to, got to, have to"
- Type contractions as is. In other words, *don't* should be typed as "don't" and *I'm* as "I'm"
- Do NOT include fillers (uhhhh, ummm, like, you know)
- Do NOT include disfluences. **Only include the fullest form of what the child actually said**. Example: "He said…he says…he tell me secrets" becomes "He tell me secrets."
- Do NOT include repeated words unless it is for emphasis, as in "He went down down down in the cave."
- Don't spend an inordinate amount of time deciphering unintelligible utterances. If the entire utterance is unintelligible, omit it. If a word is unintelligible, type nonsense, such as "aaaa" in place of the word.
- If an utterance contains more than two clauses joined with *and*, consider it a run-on sentence and divide as follows:
    We went to the circus and I saw clowns and there were elephants and I got this sweet sticky stuff.
     Becomes…
        We went to the circus and I saw clowns.
        There were elephants and I got this sweet sticky stuff.
  Do NOT do this with other conjunctions. Note in the previous example that the "and" was omitted in the second utterance.

WORD COUNT
- Use Copy #1
- Before doing any actual analysis, make sure the "Numbering" function is off. Nothing else should be on the page accept the child's 50 utterances. Turn "off" the "Numbering" function by highlighting the entire document (Control-A), going to the "Paragraph" section of the Toolbar and clicking on "Numbering."
- Word count is on the tool bar at the bottom of your screen. Record the number of words before moving on.

MLU
- Use Copy #1
- Words are already separated by a space. Now set off bound morphemes in the same way.
  - Examples:
    - "unhappily" = "un happi ly,"
    - "bunnies" = "bunnie s,"
    - "can't" = "ca n't."
- Don't worry about the spelling of the pieces or about leftover apostrophes…time is of the essence
  - Example
    - "I' m un happi ly marrie d" = 7 words, although we know it's 7 morphemes we're counting.

RULES FOR MORPHEME COUNTING
- Count as one morpheme (Do not separate with a space)
  - Ritualized reduplications (*choo-choo*)
  - Irregular past tense verbs (*went*)
  - Diminutives (*doggie*)
  - Auxiliary verbs
  - Irregular plurals (*men*)
- Count as two morphemes (Separate with a space)
  - Possessive nouns (noun + *'s* or *s'*)
  - Plural nouns (noun + *s*)
  - Third person singular present tense verbs (verb + *s*)
  - Regular past tense verbs (verb + *ed*)
  - Present progressive verbs (verb + *ing*)
  - Contractions (*do n't, I' d, he' s, we' ll, they' ve*)
- Count as one morpheme each word in proper names

- Additional bound morphemes to offset with a space

-ful	(thought ful, ful fill)	*-en*	(be en, eat en)
-ly	(real ly)	*-th*	(four th)
-y (adj.)		*-ment*	(entertain ment)
	(grump y but NOT the y in happy)		
-tion	(educa tion)	*un-*	(un happy)
-sion	(discuss sion)	*re-*	(re do)
dis-	(dis like)	*-ish*	(fool ish)
-er (comparative)		*-est* (superlative)	
	(bigg er)		(big gest)

-er
   (person or thing that does some action, as in *hammer er*, but NOT if common, such as *teacher*)

- The number of morphemes will appear in the word count on the tool bar at the bottom of the screen.
- Record the number of morphemes
- To calculate MLU
    1. Multiply the number of morphemes by 2 (# Morphemes*2)
    2. Move the decimal point two places
        i. Example
            1. 205 Morphemes
            2. 205*2=410
            3. 410 = 4.10
            4. MLU = 4.10

WORDS/SENTENCE
- Use the second copy; NOT the one used for Words or MLU.
- Before doing any actual analysis, make sure the "Numbering" function is off.
- Delete all utterances that are NOT sentences.
- Sentences and Clauses
    o Both a sentence and a clause contain a subject and a verb, as in *Mommy walked*.
    o A sentence can have more than one clause, as in *Mommy walked* but *I ran*. (2 clauses, 1 sentence).
    o The critical element in a sentence is a verb.

Rules for Identifying Sentences and Clauses
- Count imperatives as clauses. In an imperative, the subject is understood to be *you*.
    Come here. ([*You*] *come* here.)(1 clause, 1 sentence)
- Count *compound subjects or verbs* as a single clause/sentence.
    Mommy walked and ran all the way home = 1 clause, 1 sentence (1 subject but 2 verbs)
    Bobby and Jim ran fast = 1 clauses, 1 sentence (2 subjects but 1 verb)
    I ate cookies and milk. Combined objects don't count as separate clauses either.

- Count as a clause and a sentence when either *the subject or a portion of the verb is omitted* because of ellipsis.
    - Examples:
        - Who can go with me?
            - I can = 1 clause (S + aux. verb, so 1 clause, I sentence)
        - What did you do?
            - *Ran home.* (Main verb, so 1 clause, 1 sentence)
- NEVER count as a clause or a sentence if the entire verb is missing, as in "Me" in response to "Who ate the cookies?"

Calculating Words/Sentence
1. Once you have only sentences represented, record the total words from the word count section on the toolbar at the bottom of the screen.
2. Switch on the "Numbering" function.
3. Record how many sentences you have.
4. Divide the number of words by the number of sentences to get the mean words/sentence. Record this value.
5. Leave the "Numbering" function on.
    a. Example
        i. Number of words = 403; Number of sentences = 40
        ii. 403/40 = 10.075
        iii. Words per sentence = 10.075

CLAUSES/SENTENCE
- Use the number of sentences from the words/sentence analysis.
- Continue on Copy #2
- Identify the clauses
- At the beginning of each clause within a sentence, hit the "Enter" key.
- Use the Rules for Identifying Sentences and Clauses
- You may have ungrammatical pieces
    - Example
        - "The boy who's in my class is yukky" = two clauses
            - "The boy is yukky" and "Who is in my class."
                - Separate these:
                - *The boy   who's in my class is yukky*

Calculating Clauses/Sentence
- When you have separated the clauses, record the number
- Divide by the number of sentences (from the words/sentence analysis)
    - Example
        - Number of Clauses = 41; Number of sentences = 40
        - 41/40 = 1.025
        - Clauses per sentence = 1.025

NORMS TABLES

DISORDER OR NOT: Compare your results to the data on the next page. Remember that the data cover ages 6 months below and 5 months above. So 60 months covers 54-65 months.

MLU

Age	36 mos	48 mos	60 mos	72 mos	84 mos
Mean	3.96	5.33	5.48	6.68	7.73
SD	0.77	1.30	1.12	1.79	2.35
±1 SD	3.19-4.73	4.03-6.63	4.36-6.60	4.89-8.47	5.38-10.08

TNW

Age	36 mos	48 mos	60 mos	72 mos	84 mos
Mean	189.67	249.65	261.18	314.94	336.07
SD	55.36	61.43	65.90	87.41	90.97
±1 SD	134.31-245.03	188.22-311.08	195.28-327.08	227.53-402.35	245.10-427.04

CPS

Age	36 mos	48 mos	60 mos	72 mos	84 mos
Mean	1.09	1.21	1.28	1.43	1.46
SD	0.09	0.13	0.17	0.27	0.27
±1 SD	1.00-1.18	1.08-1.34	1.11-1.45	1.16-1.70	1.19-1.73

WPS

Age	36 mos	48 mos	60 mos	72 mos	84 mos
Mean	4.62	5.82	6.45	7.49	7.86
SD	0.74	1.31	1.31	2.12	2.06
±1 SD	3.87-5.36	4.51-7.13	5.14-7.76	5.37-9.61	5.80-9.92